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| 09/939,591 | 08/28/2001 | Yoshihisa Kiyotoki | NIP-239 | 3265 |

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EXAMINER

SHEEHAN, JOHN P

ART UNIT PAPER NUMBER

1742

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/939,591

Applicant(s)

KIYOTOKI ET AL.

Examiner

John P. Sheehan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The corrected or substitute drawings (Figures 8 and 9) were received on October 30, 2003. These drawings are acceptable to the Examiner.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 to 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- I. The new claim language, "being formed into various sized granular or aggregate particles to provide an uneven distribution" does not find support in the application as filed and therefore is considered to be drawn new matter.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2 and 5 to 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohriner et al. (Ohriner, US Patent No. 4,803,045).

Ohriner teaches an iron based hard facing alloy having excellent wear resistance (column 2, lines 5 to 10), a composition that overlaps the alloy composition recited in instant claims 1 to 9 (column 2, lines 40 to 51) and which contains eutectic carbides (column 2; lines 35 to 36 and column 4, lines 45 to 47) as recited in applicants' claims 1, 2 and 5 to 9. Ohriner teach specific example alloys that are encompassed by the alloy composition recited in applicants' claims (column 3, the table, Heats B1, 6995, 6961A, 6998, 6983A, 6961B, 70226B and 7030) each having hardness values that are also encompassed by the hardness values recited in the instant claims (columns 5 and 6, Tables 1 and 2).

The claims and Ohriner differ in that Ohriner does not teach the process steps recited in applicants' claims and is silent with respect to the coefficient of friction of the disclosed alloys.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the specific example alloy compositions taught by Ohriner are encompassed by the instant claims. In view of this,

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Ohriner's alloys would be expected to possess all the same properties as recited in the instant claims including the coefficient of friction recited in the instant claims, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

With respect to the process steps recited in the claims it is the Examiner's position that, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

Further, with respect to claims 8 and 9 it is the Examiner's position that these claims which recite that the claimed alloy is joined with a base metal encompasses the hard facing utility taught by Ohriner.

6. Claims 1 to 3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (Nakamura, US Patent No. 4,789,412, cited by applicants' in the IDS submitted February 28, 2002).

Nakamura teaches specific example alloys that are encompassed by the alloy composition recited in applicants' claims 1 to 3 and 6 (columns 7 and 8, the Table, ally

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Nos. 1 to 17). Nakamura teaches that the disclosed alloy contains eutectic carbides (column 2, line 55). Nakamura teaches that the disclosed alloy has utility as a nozzle of a gas turbine (column 1, lines 10 to 12).

The claims and Nakamura differ in that Nakamura does not teach the process steps recited in applicants' claims and is silent with respect to the coefficient of friction and hardness of the disclosed alloys.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the specific example alloy compositions taught by Nakamura are encompassed by the instant claims. In view of this, Nakamura's alloys would be expected to possess all the same properties as recited in the instant claims including the coefficient of friction and hardness recited in the instant claims, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

With respect to the process steps recited in the claims it is the Examiner's position that, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the process limitations

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recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

Further, with respect to claims 6 and 7 it is the Examiner's position that applicants' claim language, "A fluid device" encompasses "a nozzle of a gas turbine" taught by Nakamura.

7. Claims 1, 2, 4 and 6 to 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dong et al. (Dong, US Patent No. 4,911,768).

Dong teaches a nickel base hard facing alloy having a composition that overlaps the alloy recited in applicants' claims 1, 2, 4 and 6 to 9 (column 2, lines 5 to 20 and 52 to 57). Dong also teaches a specific example alloy that is encompassed by applicants' claims (column 3, the table, Alloy No. 3). Dong teaches that the alloy contains carbides (column 2, lines 21 and 42 and column 3, lines 15 to 27). Dong also teaches that the alloy can be used in valves (column 1, lines 58 to 62).

The claims and Dong differ in that Dong does not teach the process steps recited in applicants' claims and is silent with respect to the coefficient of friction and hardness of the disclosed alloys.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the specific example alloy composition taught by Dong are encompassed by the instant claims. In view of this, Dong's alloys would be expected to possess all the same properties as recited in the instant claims including the coefficient of friction and hardness recited in the instant claims, In re Best, 195 USPQ, 430 and MPEP 2112.01.

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"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

With respect to the process steps recited in the claims it is the Examiner's position that, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

Further, with respect to claims 8 and 9 it is the Examiner's position that these claims which recite that the claimed alloy is joined with a base metal encompasses the hard facing utility taught by Dong.

Further, with respect to claims 6 and 7 it is the Examiner's position that applicants' claim language, "A fluid device" encompasses the valves taught by Dong (column 1, lines 58 to 62).

Response to Arguments

8. Applicant's arguments filed October 30, 2003 have been fully considered but they are not persuasive.

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Applicants' argument that unlike the claimed invention Ohriner and Dong disclose a eutectic having a lattice structure is not persuasive. Regarding Ohriner, applicants have essentially stated a conclusion without citing their basis for this conclusion, such as for example, where Ohriner discloses that the eutectic carbide is a lattice structure and why the instantly claimed structure distinguishes over such a structure. Regarding Dong, applicants argue that "it can be *assumed* that, based on the photograph, that Dong et al. also disclose a eutectic carbide having a lattice structure" (emphasis added by the Examiner). This is not persuasive in that applicants have not explained why Dong's photograph would lead one to assume that Dong discloses a eutectic carbide lattice structure and why the instantly claimed structure distinguishes over such a structure.

Applicants' argument that Nakamura do not disclose the process steps recited in applicants' product by process claims is not persuasive. As set forth in the original rejection the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

Applicants' argument that "Nakamura et al. do not provide any specific description of the forming of the eutectic carbide as in the pending claims" is not persuasive. In view of the fact that Nakamura teaches specific example alloy compositions encompassed by the instant claims, Nakamura's alloys would be expected to possess all the same properties as recited in the instant claims including the same eutectic carbide structure as recited in the instant claims, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

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"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

Applicants have not presented any arguments controverting this position taken by the Examiner in the first Office action.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

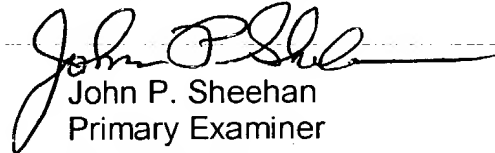
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571)

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272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.



John P. Sheehan
Primary Examiner
Art Unit 1742

jps